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Flight Into IIMC

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"During night vision goggle currency and readiness-level progression training, the crew of a UH-60L encountered instrument meteorological conditions. The aircraft entered 70- to 80-foot-tall trees in a 30-degree nose-low attitude with a 45-degree left bank angle at approximately 80 to 100 knots. The rotor system cut the trees and began to separate as the aircraft descended. The aircraft was destroyed and three crewmembers were fatally injured."

I reflected on my past experiences as an Army aviator as I read the details of this accident. What got me through 30 years of flying without killing myself? Was it the training I'd received, my flying skills or just plain luck?

Unplanned or unintentional flight into clouds in deteriorating weather continues to be a root cause of Army flight accidents. Since January 1997, 13 IMC-related accidents have claimed 41 lives and cost the Army nearly $209 million. Flying is serious business. If you're going to fly an aircraft in marginal visual flight rules conditions, you have to be proficient and confident in your abilities.

Like any other aviator, I never planned to fly into marginal conditions; but when I did, I didn't want to commit to flying instrument flight rules. I know some of you are probably thinking times are different now, with aviators operating in combat where flying higher than 200 feet will get you killed. Trust me, though, flying at 150 knots straight into the ground will kill you just as dead.

Case in point: I was flying with a first lieutenant in an OH-58D in Iraq during Operation Desert Storm. We'd been conducting a screen line and the lieutenant was flying when our aircraft went IIMC. I was prepared for this situation, and we safely maneuvered the aircraft back into VFR conditions. We successfully joined up with our Apache and made it to the screen line without incident.

In combat, we push ourselves and our aircraft to support the troops on the ground. I went IIMC three more times under NVGs during my 9-month stint in theater, and I came back to talk about it every time. That's because I made myself fly on instruments when returning from training and support missions, used the simulator and planned every flight as if it would be flown in marginal conditions.

"The Five Six Cs"

Several years ago, someone established "the five Cs," a procedure to help aviators handle those first critical seconds when an aircraft flies into IMC: control, coordination, clearance, course and call. I've added a sixth, commit, which should be your first step to ensure all the other steps work effectively. The six Cs of IMC also include those actions specified in the acronym AHTA: attitude, heading, torque and airspeed. This procedure gives the pilots something to follow when confronted with IMC.

Commit

You must commit to landing the aircraft or flying under IFR. Never attempt to re-establish visual meteorological conditions if you bump into a cloud; if you do, you're sure to end up in the accident briefs section of this magazine. I found landing to live and fight another day is better than being a statistic. If landing isn't an option, however, make the decision to fly instruments. Once you've convinced yourself that clouds aren't your enemy, you'll be able to maintain control not only of your aircraft, but also yourself.

Control

Maintaining aircraft control is the most important factor in recovering from IIMC. You'll be in serious trouble if you fail to make this transition, and the other five Cs depend on you controlling the aircraft.

Here's where AHTA comes into play. Maintain control by leveling the wings on the attitude indicator; maintain the heading and turn only to avoid known obstacles; adjust torque to climb power; and adjust airspeed to climb airspeed.

Coordination

Before flight, each crewmember should discuss what their role will be in case of IIMC. It should be understood that the pilot on the controls will concentrate on flying the aircraft by referencing the instruments. The pilot not on the controls should monitor the pilot flying and look outside for VFR conditions and obstacles. Always remember to check your onboard navigational equipment before flight too. If the weather is marginally VFR or less, it could mean the difference between living and dying.

Clearance

Climb straight ahead to an altitude that will provide clearance over the highest obstacles along the route of flight.

Course

Select the appropriate heading and turn to it. The heading you turn to most likely will be dictated by the IMC recovery procedures at your installation.

Call

Make any required radio calls for assistance or advisories.

Training

The six-C process is a tool that can help you cope with IIMC, but tools alone will not provide you confidence in your abilities. That necessary confidence will come only through training. Training to be proficient at coping with IIMC flight is probably the single most important thing you can do to ensure your survival during an IMC encounter.

My intent here isn't to debate the issue of currency versus proficiency. However, if you only fly the minimums in accordance with your aircrew training manual and conduct the majority of your simulator and hood time toward the end of your 6-month period, you're probably current but not very proficient in instrument flying.

Instrument training should be challenging but realistic and promote aviator confidence. Your training also should reflect the kind of flying you do most of the time. Analysis shows most IIMC accidents occur at night and often under NVGs. If you're an NVG pilot and fly little or no instrument training in the aircraft at night, you're playing Russian roulette with your life.

I know pilots in combat have a difficult time maintaining instrument proficiency, but sooner or later you'll find yourself inadvertent. Take every opportunity to maintain your confidence in instrument flight. A battalion commander once told me he didn't have time for his UH-60s to be used for instrument training and besides, their mission wasn't to fly instruments anyway. Instead, they were designed to move troops and supplies on the battlefield. He believed that until he went inadvertent and almost lost an aircraft and crew; afterward, he committed the time for his flight crews to conduct instrument training until they became proficient.

One last thought

Flying instruments should become second nature to you. Through training and practice, you can develop critical skills and the confidence to make your next IIMC encounter a success. Commit yourself to taking every opportunity to fly instruments. It might save your life, and who knows? You could be the next generation of Army aviator writing to others about what brought you home every time.